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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A device for regulating the temperature of a heating wire $[(RH)]$, the device comprising :

an electronic switch $[(SW)]$ connected in series with the heating wire $[(RH)]$,
means for controlling the electronic switch $[(SW)]$,

~~characterized in that~~ wherein the device also comprises means $[(4)]$ for controlling a switching time of the electronic switch $[(SW)]$ and in that the control means $[(4)]$ control the voltage across the terminals of the switch $[(SW)]$ as a function of a setpoint voltage $[(c(t))]$ defining the switching time.

2. (currently amended): The device as claimed in claim 1, ~~characterized in that~~ it ~~comprises~~ comprising: means $[(A2)]$ for measuring the temperature of the heating wire, ~~in that~~ wherein the control means turn the electronic switch $[(SW)]$ on and off as a function of the temperature of the heating wire $[(RH)]$.

3. (currently amended): The device as claimed in claim 2, ~~characterized in that~~ wherein the means for measuring the temperature of the heating wire $[(RH)]$ comprise means $[(A2)]$ for comparing the voltage present at the common point between the electronic switch $[(SW)]$ and the heating wire $[(RH)]$ with a reference voltage $[(R1, R2)]$.

4. (currently amended): The device as claimed in ~~one of the preceding~~ claim $[(s)]$ 1, ~~characterized in that~~ wherein the control means $[(4)]$ define a switching time that is longer than the normal switching time of the electronic switch $[(SW)]$ taken in isolation.

5. (currently amended): The device as claimed in ~~one of the preceding~~ claim $[(s)]$ 1, ~~characterized in that~~ wherein the control means comprise an operational amplifier $[(A1)]$, whereof a first input $[(7)]$ is connected to the common point $[(2)]$ of the heating wire $[(RH)]$

and of the electronic switch [(SW)], whereof a second input [(8)] receives the setpoint voltage [(c(t))] and whereof the output [(9)] controls the turning-on and the turning-off of the electronic switch [(SW)].

6. (new): The device as claimed in claim 2, wherein the control means define a switching time longer than the normal switching time of the electronic switch taken in isolation.

7. (new): The device as claimed in claim 3, wherein the control means define a switching time longer than the normal switching time of the electronic switch taken in isolation.

8. (new): The device as claimed in claim 2, wherein the control means comprise an operational amplifier, whereof a first input is connected to the common point of the heating wire and of the electronic switch, whereof a second input receives the setpoint voltage and whereof the output controls the turning-on and the turning-off of the electronic switch.

9. (new): The device as claimed in claim 3, wherein the control means comprise an operational amplifier, whereof a first input is connected to the common point of the heating wire and of the electronic switch, whereof a second input receives the setpoint voltage and whereof the output controls the turning-on and the turning-off of the electronic switch.

10. (new): The device as claimed in claim 4, wherein the control means comprise an operational amplifier, whereof a first input is connected to the common point of the heating wire and of the electronic switch, whereof a second input receives the setpoint voltage and whereof the output controls the turning-on and the turning-off of the electronic switch.